SX-SDPBG
802.11b/g SDIO Surface Mount Module

Ultracompact Wireless Solution for Embedded Applications

The Silex SX-SDPBG 802.11b/g wireless module is designed for OEMs who need a highly compact wireless radio/baseband solution with very low power consumption. This surface mount module contains all major components necessary to implement 802.11b/g wireless connectivity, including a radio, baseband processor, power amplifier, low pass filter, and crystal. SX-SDPBG's external diversity antenna option can give you better and wider wireless coverage. *

SX-SDPBG is ideal for low power / battery operated devices like portable medical devices, remote controls, RFID readers, navigation, mobile printers, barcode scanners and many more.

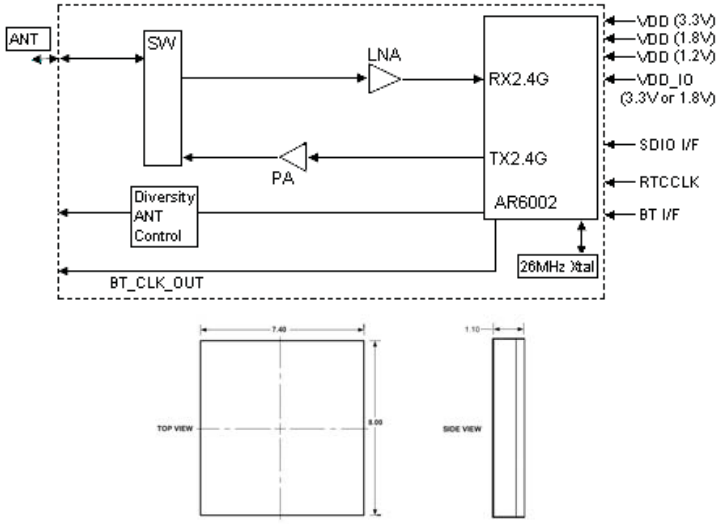
The SX-SDPBG is designed to be directly mounted to an OEM's PCB to minimize size and cost. It features an industry-standard SDIO bus interface, and is pre-tuned for ease of design and manufacturing. In order to expedite your product development process, Silex can also provide both hardware and software engineering services, as well as turnkey product design and manufacturing.

Key Features:

- Highly Integrated System for 802.11b/g WLAN
- Integrated Atheros AR6002 Single Chip design
- Very low power consumption (0.010mW standby; 0.619mW sleep; 518mW transmit / 145mW receive@2.4GHz typical)
- Advanced power management to minimize standby and active power
- Bluetooth coexistence handshaking
- WEP 64/128, WPA (TKIP), WPA2 security
- Driver development/porting and hardware design services are available from Silex. Please consult with our sales representative for further information.
- Industrial temperature (operating temperature: -40 to +85C) supported model available under separate SKU.

* Requires an external switch.

Diagrams



Specifications:

Product Name	SX-SDPBG
Chipset	Atheros Communications AR6002
Electrical Interface	SDIO V1.1 (4-bit, 1-bit)
Operating Voltage	3.30 V, 1.8V, 1.2V
Radio Specifications	2.4-2.4897GHz (FCC, ETSI, TELEC)
Radio Transmit Power (Typical)	15 dBm (802.11b/g)
Baseband Specifications	CSMA/CA media access; DSSS, OFDM
Temperature	-20 to +85 degrees C*
Packaging	7.4 x 8.0 x 1.1 mm

* Performance may vary across the temperature range and frequency depending on the implementation

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